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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/038,545 | 10/24/2001 | Katsumi Tomioka | P/1139-107 | 7121 |
| 32172 | 7590 | 09/21/2005 | EXAMINER | |
| DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP 1177 AVENUE OF THE AMERICAS (6TH AVENUE) 41 ST FL. NEW YORK, NY 10036-2714 | | | LEE, DAVID J | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2633 | |

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/038,545

Applicant(s)

TOMIOKA, KATSUMI

Examiner

David Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tochio (US Patent No. 6,563,613) in view of Effenberger (US Patent No. 5,930,018).

Regarding claims 1 and 5, Tochio teaches an optical subscriber system comprising: station equipment (fig. 2, 11); a plurality of subscriber units (fig. 2, 12₁ to 12_n); a transmission line for transmitting trailing signals from the station equipment to the plurality of subscriber units and transmitting leading signals from the plurality of subscriber units to the station equipment (fig. 2, 13); and a star coupler for branching trailing signals and combing the leading signals (fig. 2, 13a), the station equipment comprising a transmission line distance monitor/processor unit (fig. 2, 11b, 23) which sends a distance measuring control signal to each of the subscriber units, and measures, based on a distance measuring signal returned from each of the subscriber units, the transmission line distance between the station equipment and each of the subscriber units (fig. 2, 11a, and col. 5, lines 50-60). Tochio also teaches that the process is for preventing collision of signals from subscriber unit stations by giving notice of the

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distance/transmission timing of each subscriber unit (col. 6, line 64 to col. 7, line 4). Tochio does not specifically disclose that the transmission distances are compared to a reference value in order to determine whether it is smaller or larger. However, the use of comparing transmission distances to a reference value in order to determine and arrange units so as to prevent collisions is well known in the art. For example, Effenberger teaches an optical subscriber system which measures the distances to each subscriber unit and orders the subscriber units in ascending order, from smallest to largest (col. 3, lines 14-24 and see also fig. 3; in this case, the reference value would be the value that is used in comparison to the measured value when sorting the units). It would have been obvious to one of ordinary skill in the art at the time of invention to compare the distances to a reference value, as taught by Effenberger to determine whether the distance is smaller or larger in order to successfully sort the units to prevent collisions in the system of Tochio, thereby optimizing transmission performance.

Regarding claims 2 and 6, the combined invention of Tochio and Effenberger teaches the station equipment further comprising a trailing signal multiplexer (fig. 2, 26 and col. 6, lines 8-11) and a leading signal separator (fig. 2, 26 and col. 6, lines 12-15) and functions to multiplex the distance measuring equipment signal, generated in the transmission line distance monitor/processor unit, in the trailing signal multiplexer to prepare a trailing signal, which is then sent to each of the subscriber unit, (col. 6, lines 8-11) and to separate, from a leading signal returned from each of the subscriber units, a distance measuring

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signal, in the leading signal separator (col. 6, lines 12-15), which is then sent to the transmission line distance monitor/processor unit (col. 6, line 14-15).

Regarding claims 3 and 7, the combined invention of Tochio and Effenberger teaches that the transmission line distance monitor/processor unit comprises a distance measuring control signal generator (fig. 5, 23a and col. 8, lines 27-30), a distance measuring section (fig. 2, 23 and col. 5, lines 58-60), and a distance judgment section (fig. 3 of Effenberger), and the distance measuring control signal generated in the distance measuring control signal generator is multiplexed in the trailing signal multiplexer to prepare a trailing signal (fig. 2, 26 and col. 6, lines 8-11), which is then sent to each of the subscriber units, and a distance measuring signal is separated from a leading signal, returned from each of the subscriber units, in the leading signal separator to prepare a distance measuring signal (fig. 2, 26, and col. 6, lines 12-15) that is then input into the distance measuring section (col. 6, line 14-15) which sends a distance signal to the distance judgment section for judging whether the transmission line distance is larger or smaller than a reference value.

Regarding claims 4, and 8-12, the combined invention of Tochio and Effenberger discloses that the optical subscriber system which, when the transmission line distance is larger than the reference value, issues an alarm ("gives notice of" – col. 7, line 2 of Tochio).

Response to Amendment

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3. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Response to Arguments

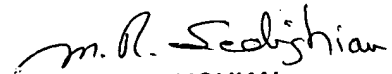
4. Regarding applicant's assertion that claims 1 and 5 do not read on the use of multiple reference values, Examiner disagrees. Examiner interprets the "reference value" of claims 1 and 5 not as a single value for every distance measurement, but as a relative value as a basis for determining whether a given distance is smaller or larger. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. The Examiner takes the position that the claim language fails to convey that only a single reference value is used for judgment.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lee whose telephone number is (571) 272-2220. The examiner can normally be reached on Monday - Friday, 9:00 am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


M. R. SEDIGHIAN
PRIMARY EXAMINER

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